

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.: 09/994,948
Appellant: Milovanovic et al
Filed: November 27, 2001
TC/AU: 2127
Examiner: Tang

Confirmation No.: 1788

Docket: TI-32228
Cust.No.: 23494

APPELLANTS' BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Sir:

The attached sheets contain the Rule 41.37 items of appellants' brief; this brief is pursuant to MPEP 1204.01 (Reinstatement of Appeal). The fee for filing a brief in support of the appeal has previously been paid; but the Commissioner is hereby authorized to charge any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,

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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Claims 1-5 are pending in the application with all claims finally rejected. This appeal involves the finally rejected claims.

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The invention provides a software framework for real-time media on an application processor which communicates with an algorithm processor which has a scheduler. Application Figs. 1a-1c heuristically show a general purpose processor (GPP) with plugins on the left (the application processor of claim 1) and a DSP with corresponding components on the right (the algorithm processor of claim 1); the framework provides for connecting a plugin to its corresponding component; and a real-time media application (Fig. 1c upper left) would use the plugins to employ the processing power of the algorithm processor's components, such as an MP3 decoder, to perform part of the real-time media application. Fig. 2a further heuristically shows the scheduler on the algorithm processor and subtasks within the two components, and Fig. 2b shows the scheduler flowchart including quality of service (QoS) controls. Application pages 7-9 describe setup and QoS design including scheduling and event notification of claim 1.

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

(1) Claims 1-2 and 5 were rejected as unpatentable over the Goldband reference in view of the Cook reference.

(2) Claims 3-4 were rejected as unpatentable over the Goldband reference in view of the Cook and Swaminathan references.

Rule 41.37(c)(1)(vii) Arguments

(1) Claims 1-2 and 5 were rejected as unpatentable over Goldband in view of Cook. The Examiner pointed to Goldband Figs. 1 and 3 for the arrangement of plugins and algorithm components plus [inherent] scheduler, and added Cook to show real-time media with a plug-in and scheduler.

Appellants reply that Goldband Fig.3 is detail of the persistent agent on the user machine of Fig.1 and shows both plugins and a scheduler on the applications (user) processor; and likewise Cook Fig.2 shows the plug-in 130 and the schedule engine 250 both on streaming server 225. In contrast, independent claim 1 requires a scheduler on the algorithm (server) processor with the scheduler providing quality of service by scheduling in response to controls from plus event notification back to the plug-in and application on the application processor. Goldband does not suggest this scheduler location nor any inherent scheduler with quality of service aspects, and Cook suggests both plug-in and scheduler on the same processor. Consequently, the references do not suggest claim 1, and claim 1 plus its dependent claims 2 and 5 are patentable over the references.

(2) Claims 3-4 were rejected as unpatentable over Goldband in view of Cook and Swaminathan.

Appellants rely upon the patentability of parent claim 1.

Rule 41.37(c)(1)(viii) Claims appendix

1. A framework for real-time media applications on an applications processor in communication with an algorithm processor, comprising:

- (a) a plurality of plugins for a real-time media application on an applications processor;
- (b) a plurality of algorithm components on an algorithm processor, each of said plugins corresponding to one or more algorithm component(s), and said algorithm processor in communication with said applications processor;
- (c) a component scheduler on said algorithm processor;
- (d) wherein said component scheduler provides quality of service for said application with regard to said components by: (i) component scheduling in response to controls from said plugins relating to execution of said components and (ii) notification of events related to execution of said components sent to said plugins.

2. The framework of claim 1, wherein:

- (a) said controls include a set of data rate for one of said components.

3. The framework of claim 1, wherein:

- (a) said events include notice of failure of meeting a presentation time for one of said components.

4. The framework of claim 1, further comprising:

- (a) an applications processor scheduler to determine deadlines for a media stream that can be scheduled on said algorithm processor, and wherein said component scheduler on said algorithm processor schedules a frame at a time of said media stream.

5. The framework of claim 1, further comprising:

(a) a plurality of second algorithm components on a second algorithm processor, with said second algorithm processor in communication with said applications processor and said algorithm processor and said plugins also relate to said second algorithm components.

Rule 41.37(c)(1)(ix) Evidence appendix

n/a

Rule 41.37(c)(1)(x) Related proceedings appendix

n/a